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DC or AC supplied electronic controlgear for LED modules – Performance requirements

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**DC OR AC SUPPLIED ELECTRONIC CONTROLGEAR FOR
LED MODULES – PERFORMANCE REQUIREMENTS**

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This redline version provides you with a quick and easy way to compare all the changes between this standard and its previous edition. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

International Standard IEC 62384 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lamps and related equipment.

This second edition cancels and replaces the first edition published in 2006 and Amendment 1:2009. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) scope extension (direct current from 250 V to 1 000 V);
- b) new specifications for measuring the power factor for controlgear with settable/non-constant output (for instance, to allow for constant light output);
- c) deletion of audio frequency requirements;
- d) selection of current test circuit by module capacitance (instead of selecting by having or not having logic circuitry) plus test circuit setup changes.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
34C/1488/FDIS	34C/1489/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

This document is to be read in conjunction with IEC 61347-2-13.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

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DC OR AC SUPPLIED ELECTRONIC CONTROLGEAR FOR LED MODULES – PERFORMANCE REQUIREMENTS

1 Scope

This document specifies performance requirements for electronic controlgear for use on ~~d.c. supplies up to 250 V and a.c.~~ DC or AC supplies up to 1 000 V (alternating current at 50 Hz or 60 Hz) and with an output frequency which can deviate from the supply frequency, associated with LED modules according to IEC 62031. Controlgear for LED modules specified in this document are designed to provide constant voltage or current. Deviations from the pure voltage and current types do not exclude the gear from this document.

NOTE 1 The tests in this document are type tests. Requirements for testing individual controlgear during production are not included.

NOTE 2 Requirements for controlgear which incorporate means for varying the output power are under consideration.

NOTE 3 It ~~may~~ can be expected that controlgear complying with this document will ensure satisfactory operation between 92 % and 106 % of the rated supply voltage, taking into account the specifications of the LED module manufacturer.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 61347-1, *Lamp controlgear – Part 1: General and safety requirements*

IEC 61347-2-13, *Lamp controlgear – Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules*

~~IEC 62031, LED modules for general lighting – Safety requirements⁴~~

INTERNATIONAL STANDARD

NORME INTERNATIONALE



DC or AC supplied electronic controlgear for LED modules – Performance requirements

Appareillages électroniques alimentés en courant continu ou alternatif pour modules de LED – Exigences de performances

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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LED MODULES – PERFORMANCE REQUIREMENTS**

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DC OR AC SUPPLIED ELECTRONIC CONTROLGEAR FOR LED MODULES – PERFORMANCE REQUIREMENTS

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IEC 61347-2-13, *Lamp controlgear – Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules*

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COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

**APPAREILLAGES ÉLECTRONIQUES ALIMENTÉS EN COURANT
CONTINU OU ALTERNATIF POUR MODULES DE LED –
EXIGENCES DE PERFORMANCES**

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La Norme internationale IEC 62384 a été établie par le sous-comité 34C: Appareils auxiliaires pour lampes, du comité d'études 34 de l'IEC: Lampes et équipements associés.

Cette deuxième édition annule et remplace la première édition parue en 2006 et son Amendement 1:2009. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

- a) extension du domaine d'application (courant continu de 250 V à 1 000 V);
- b) nouvelles spécifications pour le mesurage du facteur de puissance des appareillages avec sortie réglable/non constante (par exemple, pour permettre un flux lumineux constant);
- c) suppression des exigences en matière de fréquence audio;

- d) choix du circuit d'essai actuel en fonction de la capacité du module (en lieu et place d'un choix en fonction de la présence ou de l'absence de circuits logiques) et modification de la configuration du circuit d'essai.

Le texte de cette Norme internationale est issu des documents suivants:

FDIS	Rapport de vote
34C/1488/FDIS	34C/1489/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à l'approbation de cette Norme internationale.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2.

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APPAREILLAGES ÉLECTRONIQUES ALIMENTÉS EN COURANT CONTINU OU ALTERNATIF POUR MODULES DE LED – EXIGENCES DE PERFORMANCES

1 Domaine d'application

Le présent document spécifie les exigences de performances relatives aux appareillages électroniques pour utilisation sur des alimentations en courant continu ou courant alternatif jusqu'à 1 000 V (courant alternatif à 50 Hz ou 60 Hz) et avec une fréquence de sortie qui peut différer de la fréquence d'alimentation, associés à des modules de LED conformes à l'IEC 62031. Les appareillages pour modules de LED spécifiés dans le présent document sont conçus pour délivrer une tension ou un courant constant. Le présent document couvre aussi les appareillages qui ne sont pas des générateurs purs de courant ou de tension.

NOTE 1 Les essais spécifiés dans le présent document sont des essais de type. Les exigences pour les essais individuels des appareillages pendant la production ne sont pas incluses.

NOTE 2 Les exigences pour les appareillages qui incluent des dispositifs pour la variation de la puissance de sortie sont à l'étude.

NOTE 3 Il est probable que les appareillages conformes au présent document assurent un fonctionnement satisfaisant entre 92 % et 106 % de la tension d'alimentation assignée, en prenant en compte les spécifications du fabricant du module de LED.

2 Références normatives

Les documents suivants sont cités dans le texte de sorte qu'ils constituent, pour tout ou partie de leur contenu, des exigences du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 61347-1, *Appareillages de lampes – Partie 1: Exigences générales et exigences de sécurité*

IEC 61347-2-13, *Appareillages de lampes – Partie 2-13: Exigences particulières pour les appareillages électroniques alimentés en courant continu ou alternatif pour les modules de DEL*